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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,009	10/14/2003	Michael D. Gerdes	HE 8698US	4282
1688 7590 09/20/2007 POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			EXAMINER REIS, TRAVIS M	
			ART UNIT 2859	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/685,009	Applicant(s) GERDES ET AL.	
	Examiner Travis M. Reis	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9, 20-31, 34-37, 39-43 and 60-70 is/are pending in the application.
- 4a) Of the above claim(s) 4-7, 29-31, 34-37, 39-43, 60 and 65-67 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 9 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 20-28, 61-63 and 68-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell (U.S. Patent 3888128) in view of Mieling (U.S. Patent 5471754).

With reference to claims 20-24 & 26-28, Mitchell discloses a system, and method of using an adjustable mounting flange (10) for mounting vehicle wheels (19) each having different lug patterns on the shaft of a balancing machine (15) which comprises a flange plate (34) having a central bore extending from a front face to a rear face (Figure 2); an adjusting plate (35) disposed adjacent said rear face and coupled to said flange plate for coaxial rotational movement relative to said flange plate (Figure 4) and wherein said plates are rotated relative to each other as part of the alignment process to common radial positions simultaneously (col. 3 lines 39-42); a plurality of slots passing through said flange plate(37); a plurality of circumferentially equidistant slots passing through said adjusting plate(38); a plurality of mounting pins (30), each of said plurality of mounting pins including a guide pin (28) adapted for engagement with said flange plate and a contact tip (31) adapted for engagement with each of the plurality of wheel lug holes, wherein said each of said slot sets are arranged in annular patterns (Figure 4-6) with identifying indicia (48) being associated a slot; and wherein said plurality of slots in said flange plate and said plurality of slots in said adjusting plate cooperatively define one or more sets of unobstructed passages and corresponding to each lug hole in a wheel lug pattern through said adjustable mounting flange (Figure 4); and wherein

each of said unobstructed passages in a set of unobstructed passages is disposed at a common radial distance from an axis of said central bore (Figure 5), said common radial distance associated with a rotational position of said adjusting plate, wherein said rotation of said adjusting plate relative to the flange plate alters the radial position of each of said unobstructed passages and plurality of guide pins simultaneously (col. 3 lines 39-42); wherein said plurality of slots passing through said flange plate include at least one set of circumferentially equidistant spaced slots, said slots in said set having a common skewed configuration and wherein the adjusting plate has a different common skewed configuration (Figure 4); wherein a range of rotational movement of said adjusting plate about said central axis corresponds with an infinite range of radial movement of each of said unobstructed passages in said set of unobstructed passages between a minimum inner radial position and a maximum outer radial position (Figure 4); further comprising at least one tapered centering cone(18) having at least a first tapered surface increasing in diameter from a first end, said tapered centering cone configured for placement on the spindle shaft of the balancing machine to support a vehicle wheel thereon in conjunction with said flange and adjusting plates (Figure 5).

Mitchell does not disclose said mounting flange assembly is a single plate with a plurality of vehicle wheel lug hole configurations, each lug hole configuration having a different number of lug holes.

Mieling discloses a kit to align wheels of a vehicle including a single flange plate (33) with a plurality of different vehicle wheel lug hole configurations (34-37, 44-47), each lug hole configuration having a different number of lug holes (col. 7 lines 49-59) (Figures 1 & 5). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the mounting flange plates disclosed by Mitchell with the single

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flange plate disclosed by Mieling in order to be able to service different vehicle wheels without switching the flange plate and save time.

With reference to claim 25, Mitchell does not disclose indicia associated with each slot. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an indicia associated with each slot, since it has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add an indicia to every slot in order to be able to read the indicia if the other slots are obscured.

3. Claims 1, 3, 61-63, & 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell & Mieling as applied to claims 20-28 above, and further in view of Hansen (U.S. Patent 6772631).

Mitchell & Mieling discloses all of the instant claimed invention as stated above in the rejection of claims 20-28, but do not disclose said cone has an identifying indicia.

Hansen discloses a vehicle wheel balancer with a centering sleeve/cone (25) with indicia to match the appropriate sleeve to the given wheel (col. 2 lines 1-4). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the indicia disclosed by Kraft to the centering cone disclosed by Mitchell & Mieling in order to match the appropriate sleeve to the given wheel.

4. Claims 2 & 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell, Mieling, & Hansen as applied to claims 1, 3, 61-63, & 68-70 above, and further in view of the prior art disclosed in page 4 of the Specification (hereafter Prior Art).

Mitchell, Mieling, & Hansen disclose all of the instant claimed invention as stated above in the rejection of claims 1, 3, 61-63, & 68-70, but do not disclose said cone has a double taper

having a first tapered surface increasing in diameter from a first end, and a second tapered surface increasing in diameter from a second end axially opposite said first end.

The Prior Art discloses a system of centering cones having a double taper having a first tapered surface increasing in diameter from a first end, and a second tapered surface increasing in diameter from a second end axially opposite said first end in order to minimize the number of centering cones (Page 4 lines 3-7). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add a secondary taper to the centering cones disclosed by Mitchell, Mieling, & Hansen in order to minimize the number of centering cones.

Response to Arguments

5. In response to applicant's arguments that the combination of Mitchell and Mieling lacks the limitation of a single mounting flange assembly with infinite radial adjustment for guide pin contact tips associated with a plurality of vehicle wheel lug configurations; these arguments have been fully considered but they are not persuasive since Mitchell discloses mounting flange assemblies with infinite radial adjustment, while Mieling teaches that a single flange plate is sufficient, as detailed above in paragraph 2.

6. Applicant's arguments with respect to claims 1, 3, 20-28, 61-64, & 68-70 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the

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THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M. Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Travis M Reis
Examiner
Art Unit 2859

Diego Gutierrez
Supervisory Patent Examiner
Tech Center 2800

tmr
September 17, 2007